

(19)



Europäisches Patentamt

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(11)

EP 0 993 965 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
30.01.2002 Bulletin 2002/05

(51) Int Cl.7: **B41M 5/30**, B41M 5/40

(43) Date of publication A2:
19.04.2000 Bulletin 2000/16

(21) Application number: **99308135.5**

(22) Date of filing: **15.10.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
 MC NL PT SE**
 Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **16.10.1998 JP 29584598**
28.05.1999 JP 15067199

(71) Applicant: **NIPPON PAPER INDUSTRIES CO., LTD.**
Kita-ku, Tokyo 114-0002 (JP)

(72) Inventors:

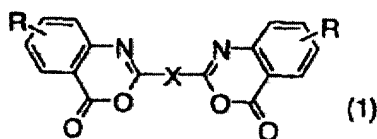
- **Ryu, Yukiko, Nippon Paper Industries Co.,Ltd.**
Tokyo 114-0002 (JP)
- **Date, Takashi, Nippon Paper Industries Co.,Ltd.**
Tokyo 114-0002 (JP)
- **Ohashi, Reiji, Nippon Paper Industries Co.,Ltd.**
Tokyo 114-0002 (JP)

(74) Representative: **Cresswell, Thomas Anthony**
J.A. KEMP & CO. 14 South Square Gray's Inn
London WC1R 5JJ (GB)

(54) Thermally sensitive recording medium

(57) A thermally sensitive recording medium comprising, on a substrate, one or more layers including a thermally sensitive recording layer which comprises an electron donating compound and an electron accepting compound, wherein at least one of said one or more layers comprises, as an ultra violet ray absorbing agent, at least one benzoxadinone compound of formula (1)

wherein, R represents hydrogen, hydroxyl, C₁-C₈ alkyl, C₁-C₆ alkoxy, C₁-C₆ acyl, C₁-C₆ acyloxy, C₁-C₆ alkoxy carbonyl, carboxyl, halogen or nitro and X represents a divalent group or a direct bond.

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EUROPEAN SEARCH REPORT

Application Number
EP 99 30 8135

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Y	EP 0 826 511 A (OJI PAPER CO) 4 March 1998 (1998-03-04) * the whole document *	1-9	B41M5/30 B41M5/40
Y	EP 0 068 327 A (TEIJIN LTD) 5 January 1983 (1983-01-05) * page 1, line 1 - line 8 * * page 2, line 15 - line 21 * * page 11, line 17 - line 32 * * page 17, line 28 - page 18, line 3 * * page 20, line 18 - line 30 * * compounds 12-48 * * claims 11,26 *	1-9	
A	EP 0 767 074 A (JUJO PAPER CO LTD) 9 April 1997 (1997-04-09) * page 9, line 16 - line 42 * * example 8 *	1	
A	US 5 560 852 A (MURA JEAN-LUC) 1 October 1996 (1996-10-01) * column 1, line 33 - column 2, line 5 * * examples *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B41M
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		4 December 2001	Whelan, N
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 30 8135

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04-12-2001

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0826511	A	04-03-1998	JP	10071770 A	17-03-1998
			BR	9704557 A	17-11-1998
			DE	69702098 D1	29-06-2000
			DE	69702098 T2	14-09-2000
			EP	0826511 A1	04-03-1998
			US	5935900 A	10-08-1999
EP 0068327	A	05-01-1983	JP	57209979 A	23-12-1982
			CA	1197644 A1	03-12-1985
			DE	3266362 D1	24-10-1985
			EP	0068327 A1	05-01-1983
			US	4446262 A	01-05-1984
EP 0767074	A	09-04-1997	DE	69612448 D1	17-05-2001
			DE	69612448 T2	26-07-2001
			EP	0767074 A2	09-04-1997
			JP	3114171 B2	04-12-2000
			JP	9156227 A	17-06-1997
			US	5731262 A	24-03-1998
US 5560852	A	01-10-1996	DE	4410539 A1	28-09-1995
			AT	159777 T	15-11-1997
			CA	2145434 A1	27-09-1995
			DE	59500882 D1	04-12-1997
			EP	0674038 A1	27-09-1995
			ES	2108549 T3	16-12-1997
			HK	1010404 A1	20-04-2000
			JP	7324283 A	12-12-1995
			ZA	9502428 A	25-09-1996

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82